

Three Mile Island Chronology (TMI) at the Idaho National Laboratory (with comments from the record)

April 18, 1979 edition of INEL News, page 1

INEL helps in Three Mile Island effort

March 28-April 2, 1979: INEL teams were on alert with selected team members traveling to TMI. Nick Kauman, Idaho LOFT Director, and Larry Ybarrondo, Idaho Water Reactor Research Director, were dispatched to TMI on day one or two. Several days later, Willis Bixby of DOE ID staff joined INEL team at TMI.

Crews at Semiscale, LOFT Test Support Facility and Code Development worked March 30-April 2, 1979 (Friday through Monday) setting up models simulating the accident, testing analyzing data and evaluating concerns and options.

Idaho Physics Division: Jack Liebenenthal, Idaho Thermal Analysis; Ron Ayres, Idaho Thermal Reactors Technical Support; Rich Green, Idaho Safety Standards worked with a firm in Salt Lake City to study the problem of removing hydrogen from water.

Wes Headington, Semiscale Facilities and Test Operations, alerted March 30 "to keep a crew on the job. They worked through that night modifying the Semiscale loop to simulate the type of plant at Three Miles Island."

March 31 (Saturday), Semiscale crew "conducted the first experiment to remove a gas bubble from the system without uncovering the heater core. On Sunday (April 1), following an early-morning briefing, the crew worked all day and night to prepare for another experiment. Early Monday (April 2), they completed the second test and reported to DOE."

June 5, 1979 edition of INEL News, page 2

LOFT L2-3 Test completed successfully

"INEL scientists termed the May 12 LOFT L2-3 loss of coolant test a 'total success' after looking at initial data."

This is the second in series of nuclear tests at LOFT. The first, last December was conducted at 50 percent less power. The May test was conducted with the reactor power density at 12 kilowatts per foot, typical of most commercial power plants when at full power."

"The Nuclear Regulatory Commission (NRC) and INEL officials are now reassessing the schedule for future large break simulation and already planned tests to study the effects of small pipe breaks because of the success of the first two nuclear tests and the problems at Three Miles Island, according to Don McPherson, NRC Branch Chief of Reactor Safety."

December 4, 1979 edition of INEL News, pages 1-2

LOFT runs first small pipe break test

"The third in a series of nuclear tests in the LOFT reactor was conducted November 20 and preliminary data indicated all went as planned. The test (L3-1) simulated the events, which would follow a small break in a pipe supplying cooling water to the nuclear reactor core in a larger commercial reactor. The experiment began with the

opening of a valve, simulating a small pipe break. The size of the LOFT 'break' was two-thirds of an inch, representing about a four-inch break in a commercial reactor."

"These 'small break' experiments were moved up in sequence of tests planned for the LOFT reactor in response to the accident at Three Mile Island and the successful results of large break LOFT test performed earlier this year."

"As late as last June, this test was scheduled for May, 1981," says Nick Kaufman, LOFT Director, "But as a result of the TMI accident, was advanced about a year and a half. I'd like to publicly acknowledge the personnel of DOE-ID, the Nuclear Regulatory Commission and EG&G Idaho for their tremendous efforts in meeting this stepped-up schedule."

"Austrian, Dutch, Finnish, German, Japanese and Swedish scientists, on assignment to the INEL, observed the experiment and will assist in the detailed analysis of the test."

"In addition, the United States and foreign scientific attention is focused on the experiment because the NRC designated the test as a 'standard problem'. This means that the reactor safety engineers throughout the U.S. and many foreign countries will predict the reactor's behavior, using their own computer codes (after being given the conditions existing in the facility at the initiation of the simulated small pipe break). These predictions will be compared later with the actual test results to determine how well the various codes performed. Nuclear tests in LOFT are expected to continue with a variety of pipe break sizes and locations and other types of accidents."

January 2, 1980 edition of INEL News, pages 4-5

Energy crunch brings expanded INEL role - TMI

"Accidents simulated. In early 1979, reactor safety research focused on the hypothetical large pipe break loss of coolant accidents. Two tests of the Loss of Fluid Test Facility (LOFT) indicated that safety margins for those type accidents were greater than believed. For example, fuel-cladding temperatures were several hundred degrees Fahrenheit less than even the 'best estimate' computer predictions."

"In mid-year, the Three Mile Island (TMI) accident redirected the emphasis of many programs toward investigating the more probable small break loss of coolant accidents. LOFT, conducted two tests to study instrumentation adequacy and computer code capability. Days after the TMI accident, the Semiscale Facility performed several experiments to provide data used to determine the most appropriate recovery techniques at the Pennsylvania facility. Similar tests are scheduled for 1980."

February 19, 1980 edition of INEL News, pages 1-2

2nd LOFT small break test conducted

"The director called it the most difficult test undertaken at LOFT so far. The manager of the experimental program said the eight-hour simulated accident would stress machines and operators."

"The February 6 test at INEL's Loss of Fluid Test Facility was planned to test a small break in the reactor's cooling system. The Nuclear Regulatory Commission shifted emphasis in its safety research after the Three Mile Island accident. Previously, attention focused on large pipe breaks. But TMI showed that small break safety tests were needed, too."

“We realized accidents could start out relatively benign, but operators through taking wrong action, could defeat the safety systems,” Tom Murely, Director of the NRC’s Reactor Safety Research Division, said. “For this test, action as to be required both by automatic safety systems and by operators.”

“Three buses transported visitors – reactor equipment vendors, Nuclear Regulatory Commission officials, local officials, media and overseas guests – to LOFT’s north end location.”

“Nick Kaufman, director, briefed the visitors, explaining the test’s length gave the equipment a greater exposure to malfunction. Larry Leach, LOFT experimental program manager, added specifics so guests would know what to expect.”

“A week after the test, personnel had a chance to look over the data and analyze whether the test met its objectives.”

“We’re very satisfied,” Leach said. “Analysis will go on for months and help us learn a lot about this type of small break accident, but the basic overall behavior of the systems went as expected.”

LOFT officials plan more small break tests. The February one was the second in a series of six. Cost for the program is \$40 million a year and the NRC predicts LOFT’s safety program will total \$500 million over its lifetime.”

“The 50 megawatt thermal reactor is the largest in the NRC’s research program to study emergency core cooling systems for light water-cooled reactors in the event of a pipe break accident. Data from the LOFT experiments are being used to help predict the performance of cooling systems in large, commercial reactors and to aid the NRC in licensing reviews.”

June 17, 1980 edition of INEL News, page 3

LOFT conducts TMI type test

“The fifth in a series of nuclear experiments at LOFT was conducted May 29. The experiment simulated events, which would follow a loss-of-feedwater to all of the steam generators of a large commercial nuclear reactor system. This type of problem was the initiating event in the Three Mile Island accident.”

The experiment began with the closing of the feedwater valve. The safety systems quickly stopped the nuclear chain reaction. The system then stabilized at a new equilibrium condition and then was returned to a controlled standby condition.”

“The test lasted about 45 minutes and data was taken on water levels, system pressures, fuel rod and coolant temperatures and coolant flow rates.”

“The experiment was the first of a series of ‘anticipated transient’ tests with the LOFT reactor at power. Anticipated transients are those, which are expected to occur at least once in the life of a nuclear plant. These experiments were moved up in the original sequence of experiments at LOFT in response to the TMI accident and the successful results of the LOFT large break experiments performed in 1979.”

July 1, 1980 edition of INEL News, page 1

LOFT L3-7 test successfully completed

“The third nuclear powered test in the LOFT small break test series was successfully conducted Friday, June 20, at the INEL. The test, designated L3-7,

simulated a one-inch pipe break in a commercial pressurized water reactor, approximately the size of the open valve at Three Mile Island.”

“The break led to partial depressurization of the plant and energized only that part of the Emergency Core Cooling Systems, which function at high pressure. The main cooling pumps were shut down as required in commercial reactor plants since TMI. Cooling of the reactor was accomplished only by water or steam circulation to the steam generator arising naturally due to the temperature difference in the primary cooling system. The study of this natural circulation was a main focus of the test.”

About one-half hour into the test, the Emergency Core Cooling Systems were shut down as they were during the TMI accident. This caused water levels in the reactor to decrease and changed the character of the natural circulation between the reactor and the steam generator. The plant operators then increased cooling by changing water levels in that steam generator in order to test the effectiveness of such actions to maintain core cooling during these simulated accident conditions and their effect on the natural circulation process.”

“After one and one-half hours, the emergency cooling systems were turned back on, re-establishing primary system water levels, and the break closed. Finally, the plant was cooled down and depressurized by the reactor operators and the test concluded after six hours.”

“The L307 test permits the measurement of conditions judged critical to the safe termination of the more probable accident sequences postulated for nuclear plants. In fact, over 300 different variables were measured. More importantly, it permits the testing of operational methods and control action typical of the nuclear plants under conditions characteristic of postulated accidents. Among the accident recognition techniques tested were color displays driven by computers which are similar to those proposed for advance reactor control rooms.”

July 1, 1980 edition of INEL News, page 4

Organizations compile TMI data for programs

“Four organization are collaborating in an effort to ensure that all of the unique data and information from the TMI accident are obtained in an orderly manner and integrated into government and private light water reactor safety and developments programs. DOE, Electric Power Research Institute, General Public Utilities and the NRC are participating in this cooperative agreement – the Technical Information and Examination Program.”

“The environmental conditions within the TMI Unit 2 containment and the reactor system present one of the most technically challenging decontamination and radioactive waste management and radiation exposure control situation ever encountered. It represents an opportunity for state-of-the-art advancement not available through normal research, development and test programs.”

“Idaho has been selected by DOE to play a major role in the Technical Information and Examination Program by providing management and technical expertise.”

The various tasks involve gathering data, taking samples to assess the behavior of fission products, testing equipment and components to determine how they performed during and after the accident, developing and testing waste handling alternatives and

examining the fuel and core components. Seven EG&G Idaho employees took temporary assignments in Pennsylvania in early January on the TIO staff. They are Harold M. Burton, TIO Manager; Greg R. Eidam, Robert E. Holzworth, Frank J. Kocsis and Jam W. Mock, technical coordinators; Joseph R. Kerscher, plans and budget coordinator and Donna L. Morris, material and contractors coordinator. In addition, Dr. Willis W. Bixby, DOE-ID, is assigned as manager of the DOE/TMI site office.”

November 4, 1980 edition of INEL News, pages 1 and 2

TMI entry termed successful

“Gregory R. Eidam joined the 14-member entry team for the fifth visit inside the Three Mile Island Unit 2 containment (on Oct. 16). Eidam’s major effort was to inspect the polar crane that travels inside the domed containment building. Eidam is scheduled to join the seventh containment entry team in early March for mechanical and electrical inspections of the crane and its components.”

April 7, 1981 edition of INEL News, page 3

Understanding TMI challenges TIO group

“The Three Mile Island/Technical Integration Office at Middletown, PA are participating in one of the company’s first site office ventures and, incidentally, breaking new ground in research for the nuclear industry.”

“Headed by Harold Burton, EG&G/TMI site manager, other personnel from the Idaho office include procurement specialists Donna Morris and Julie Longhurst, planning specialists Joe Kerscher, documentation coordination Fran Kocsis and engineer Greg Eidam and Bob Holzworth.” Remainder of article is profile on individual contributions and comments.

April 7, 1981 edition of INEL News, pages 4-5

Water reactor safety research aids in understanding of reactor behavior

Article is overview of research from 1955 through the late 1970s. section on TMI – “During the Three Mile Island accident, the facility was called upon to provide information quickly on the hydrogen bubble forming in the containment vessel of Unit 2, and subsequently to reproduce the entire sequence of events of the first two or three hours of the TMI accident. After TMI, the emphasis in water reactor safety shifted to small break tests. This emphasis brought about another modification of Semiscale, Mod-2A, which was completed in 1980.”

May 5, 1981 edition of INEL News, page 1

Tests results unexpected

“The most recent LOFT test, simulating conditions that led to the march 1979 accident at TMI, has proved that simulated accident conditions were much less severe than computer codes had predicted.”

“The three part test, L9-L3-3/L8-1A, was to have been run continuously with each part designed to address specific issues relating to the designed to commercial pressurized water reactors. However, core uncover, the third part of the test, could not be carried out because temperature and pressure levels did not increase as rapidly as predicted. This left enough water in the primary system to keep the core covered.”

June 2, 1981 edition of INEL News, page 1

TMI/TIO ship waste to BCL

“Idaho’s Three Mile Island/Technical Integration Office played a lead role recently in the first shipment of highly radioactive waste from the TMI nuclear plant to Battelle Columbus Laboratory (BCL) in Ohio.”

January 5, 1982 edition of INEL News, page 1

Semiscale tests measurements system

“A liquid level measurement system for reactors that would have made a considerable difference at the Three Mile Island accident, is currently being tested in a series of experiments at DOE’s Semiscale facility at the INEL (Idaho).”

“The device, designed by Westinghouse, is intended to be used in commercial reactors to meet a post-TMI NRC requirement for all utilities to install an ‘unambiguous indicator of coolant level’ in commercial reactors.”

“Walter Lyman, advisory engineering the Nuclear Technology Division for Westinghouse says the NRC offered his company the use of any of its test facilities and it was jointly concluded that Semiscale, with its full-height steam generators and non-nuclear core, was the best test facility available for the experiments needed.”

March 16, 1982 edition of INEL News, page 3

After three years, what changes can be seen

“March 18, 1982 marks the third anniversary of the Three Mile Island accident. Have there been any significant changes in attitudes or activities in the nuclear community since the accident? Has news of the benefits derived from TMI Lessons Learned begun to offset the initial adverse public reaction to nuclear energy as a result of the accident and publicity?”

Sample of comments from Idaho professionals include: “This served to bring into focus the importance of radiological impact in an accident which leads to degradation of the reactor core.” “The nuclear community mostly talks to itself and not the American public. I believe the average American citizen has very little knowledge of the action taken by the government and industry subsequent to TMI. Adverse public reaction will begin to subside when we put into action a credible plan to communicate with the layperson about nuclear energy!”

April 6, 1982 edition of INEL News, page 1

TMI cask of resin liners to be examined at INEL

“A cask containing resins used to strip radioactive materials from water in the damaged Three Mile Island plant will arrive early in April at INEL as part of the laboratory’s long-time reactor safety research and development program. The research will be done for DOE by Idaho at INEL’s Test Area North.”

May 18, 1982 edition of INEL News, pages 4 and 5

Hydrolasing used in TMI decontamination data being evaluated

“After five months of preparation and many thousands of hours of work, the first large-scale decontamination experiment in the Three Mile Island Unit 2 reactor building was completed March 24, 1982. As part of the DOE research and development program

at the disabled reactor, EG&G Idaho personnel at the on-island Technical Integration Office were instrumental in organizing and directing the experiment. During the three-week experiment, GPU Nuclear and its subcontractors used a pressurized-water spray technique called hydrolasing to decontaminate reactor building areas.”

August 37, 1982 edition of INEL News, page 2

With TV camera, personnel take “quick look” inside TMI Unit 2

“Idaho personnel recently provided technical support and specialized equipment for the first ‘quick look’ at the damaged Three Mile Island Unit 2 reactor core since the accident in March 1979.”

“For the /Quick Look, Idaho personnel assigned to TMI designed a liquid sampling device to determine whether water in the reactor vessel was clear enough to permit using the camera. Water obtained with the sampling device indicated sufficient clarity and the camera was then lowered into the vessel.”

“The Quick Look was another step in the activities aimed at removing the reactor vessel head. It will be followed by attempts to uncouple all control rod drive mechanism and the completion of through-head examination and head removal prerequisites.”

August 17, 1982 edition of INEL News, page 3

Device samples gases from TMI liners

“A remotely operated device being used at the Three Mile Island to sample, vent and purge potentially combustible gases from the EPICOR II resin liners was designed and built at the INEL.”

“The device, simply called a gas sampler, is used to test the liner for the presence of hydrogen and to replace the gases in the liners with noncombustible nitrogen to ensure safe shipment to INEL. A second gas sampler, very similar to the one at TMI, is being used to vent gases from the liners at the TAN 607 Hot Shop, where the liners are to be received.”

September 21, 1982 edition of INEL News, page 2

Removing leadscrew makes quick look possible at TMI

“There was another element besides the video camera involved in the three recent ‘quick looks’ inside the damaged TMI reactor core. That element was a 24-foot long leadscrew, extending below the top of the reactor, that had to come out.”

February 15, 1983 edition of INEL News, page 2

Shipment of SDS line marks milestone for TMI Program

“On Dec. 31, 1982, a major milestone was reached in the DOE’s program at Three Mile Island. A shielded transportation cask containing a liner with more than 100,000Ci of radioactive cesium, strontium and daughter products was shipped to the DOE’s Pacific Northwest Laboratories for waste immobilization studies.

March 15, 1983 edition of INEL News, page 3

Multisensory nature trail on TMI

April 19, 1983 edition of INEL News, page 1

PBF fuel damage test set

“The severe fuel damage tests will provide a better understanding of the 1979 accident at Three Mile Island. The information will be used to verify computer codes that predict what happened during a severe reactor accident, to help provide improved reactor designs and safety features, and to evaluate emergency response procedures.”

July 19, 1983 edition of INEL News, page 1

Metallurgical studies show EPICOR liners life exceed 300 years

August 16, 1983 edition of INEL News, page 2

Final EPICOR liner shipment reaches INEL

“Praise and personal congratulations from DOE accompanied the final shipment of 50 EPICOR Liners from TMI to INEL by July 15.” First shipment arrived in Idaho in April 1982.

September 20, 1983 edition of INEL News, page 1

Severe Fuel Damage Test Successful

“An experiment paralleling the actual conditions in the Three Mile Island nuclear reactor core was successfully completed September 8 at the INEL.”

October 4, 1983 edition of INEL News, page 1

Team Takes TMI Core Samples – Idaho designs special tools

December 20, 1983 edition of INEL News, page 3

Model depicts data from soar monitoring of TMI Core

January 3, 1984 edition of INEL News, page 2

DOE Recap: TMI Core Samples Take

May 15, 1984 edition of INEL News, page 2

INEL concludes TMI hydrogen burn study

June 19, 1984 edition of INEL News, page 2

TMI prefilters successfully disposed of at Wash. Site

September 4, 1984 edition of INEL News, page 2

Defueling of TMI Unit 2 is a bit closer – Reactor Head Lifted

January 8, 1985 edition of INEL News, page 2

1984 Recap Shows Idaho Engaged - TMI progress made

March 5, 1985 edition of INEL News, page 1

First of its kind disposal technology ushers last of 46 TMI-2 prefilters to Washington

July 2, 1985 edition of INEL News, page 1

July test to be largest, and last

“Thirty-seven nuclear tests, examining different reactor components and responses to various postulated accidents, have been conducted at LFOT since 1978. This 50-megawatt thermal reactor is the only reactor in the world for total systems simulations of loss-of-coolant accidents in pressurized water reactors. The reactor system is scaled to represent a commercial four-loop pressurized water reactor power plant. LP-FP-2 will be the last test in the LOFT facility. After fuel removal, the facility will be deactivated and made available for possible future programs.” Played a key role in analyzing TMI accident.

March 4, 1986 edition of INEL News, pages 4-5

One-of-a-kind shipping cask, railcars ready to transport TMI Core

April 1, 1986 edition of INEL News, page 4

DOE-ID weaves common thread among research projects throughout the U.S. – Three Mile Island

October 7, 1985 edition of INEL News, pages 1, 8

Unique machine TMI-2 Core Boring

May 5, 1987 edition of INEL News, page 2

Geologists assist in TMI-2 Core Assessment

February 2, 1988 edition of INEL News, page 1

Third cask expedites TMI-2 fuel shipments

June 19, 1990 edition of INEL News, pages 4-5

Three Mile Island journey reaches end of the line

“After a decade of cleanup work, the last of 22 shipments of damaged fuel from the Three Mile Island Unit 2 nuclear reactor has arrived and been placed into interim storage at INEL.”

Three Mile Island and INEL Chronology (Continued)

Documents on INEL.gov website

DOE RELEASES FINDING OF NO SIGNIFICANT IMPACT FOR THE TEST AREA NORTH POOL STABILIZATION PROJECT – *"Finish the 60, grow the 40"*

May 14, 1996, Storage of TMI material, an update

The U.S. Department of Energy is moving forward with the Test Area North Pool Stabilization Project at the Idaho National Engineering Laboratory. The Test Area North pool currently stores core debris from the Three Mile Island reactor accident and government-owned spent nuclear fuels, consisting of Loss-of-Fluid-Test program fuel and other government-owned commercial fuel.

http://newsdesk.inel.gov/press_releases/1996/tanfonsi.html

DOE RELEASES DRAFT TAN POOL STABILIZATION PROJECT UPDATE,
June 23, 1997 – TMI storage materials addressed

The U.S. Department of Energy is releasing a draft environmental assessment update for the Test Area North (TAN) Pool Stabilization Project for the Idaho National Engineering and Environmental Laboratory along with a draft Finding of No Significant Impact (FONSI). The TAN pool currently stores core debris from the Three Mile Island-2 (TMI-2) reactor accident, Loss-of-Fluid Test program fuel and other government-owned commercial fuel.

http://newsdesk.inel.gov/press_releases/1997/prtanpools2.html

NRC TO DISCUSS LICENSE FOR DRY FUEL STORAGE FACILITY AT INEL
Jan. 13, 1997, DOE NEWS RELEASE

Staff members from the Department of Energy and the Nuclear Regulatory Commission will meet with the public in Idaho Falls Feb. 6 to discuss the Department of Energy's application for a license to construct a dry modular storage facility for Three Mile Island Unit 2 core debris now stored at the Idaho National Engineering Laboratory. The meeting will be held at 7 p.m. at the Shilo Inn, Idaho Falls.

The INEL received about 330,000 pounds of core material from the damaged TMI-2 reactor between 1986 and April of 1990. The core material was studied as part of an INEL research program evaluating what happened during the TMI-2 accident, and identifying lessons learned for future reactor operations.

The material is stored in a water pool at the INEL's Test Area North. Under the spent fuel settlement agreement with the state of Idaho, DOE must complete construction of a dry storage facility by Dec. 31, 1998, and the agency must complete transfer of all the TMI-2 core debris to the dry storage facility by June 1, 2001.

PUTTING THIS STORY INTO CONTEXT: As part of its commitment to the state of Idaho, the Department of Energy will contract for construction of a dry storage facility for the Three Mile Island Unit 2 core debris now stored at the Idaho National Engineering Laboratory. DOE is seeking a Nuclear Regulatory Commission license to construct the storage facility at the Idaho Chemical Processing Plant. The NRC has accepted DOE's license application for review, and DOE and NRC will hold a public meeting in Idaho Falls Feb. 6 to describe the licensing process and answer questions.

http://newsdesk.inel.gov/press_releases/1997/PR_nrc.html

INEEL MEETS MILESTONE FOR MOVING TMI-2 SPENT FUEL

March 31, 1999, DOE News Release

The U.S. Department of Energy's Idaho National Engineering and Environmental Laboratory moved its first shipment of Three Mile Island-2 spent fuel and core debris into dry storage today, meeting the March 31, 1999 milestone in the 1995 Idaho Settlement Agreement.

The achievement comes less than two weeks after the Nuclear Regulatory Commission issued the DOE a license to operate the dry storage Independent Spent Fuel Storage Installation-the first such NRC license DOE has ever received. INEEL officials sought the NRC license because the TMI-2 material will eventually go to an NRC-licensed permanent repository. Having an NRC license for the ISFSI transport and storage system would likely help in certifying the material for acceptance at the permanent repository that will also be an NRC licensed facility.

With the first shipment completed, the INEEL begins a two-year campaign to move all the TMI-2 material out of underwater storage at Test Area North and into the ISFSI at the Idaho Nuclear Technology and Engineering Center. The job must be completed by June 30, 2001.

http://newsdesk.inel.gov/press_releases/1999/INEEL_MEETS_MIL.htm

INEEL Progress - Reporter 1999, A Status Report on Environmental Management at INEEL – Three Mile Island, page 5 –

1998 Accomplishments:

- Constructed temporary dry storage facility at INTEC to hold TMI fuel and core debris
- Submitted the operating license for the TMI dry storage facility to NRC
- Completed a Environmental assessment for TMI dry storage facility

1999 Goals:

- Move additional TMI spent nuclear fuel and core debris into new dry storage facility at INTEC (began on March 31, 1999)

<http://www.inel.gov/publicdocuments/pdfs/emprogress99.pdf>

Proving the Principle, TMI-INEL Summary (pages 224-226),
1999 (INEEL 50th Anniversary Book)

Overall summary of the accident and good, concise treatment of INEEL's involvement during the accident and management of cleanup and waste.

http://www.inel.gov/proving-the-principle/chapter_23.pdf

TMI project reaches halfway point *by John Walsh, iNews,*
Feb. 12, 2001

The Three Mile Island Unit 2 Dry Storage Project has reached the halfway point. On Jan. 19, half of the 344 canisters holding spent nuclear fuel and core debris from the damaged reactor core of Three Mile Island Unit-2 had been removed from water storage at TAN, dried and made ready for shipping to the Independent Spent Fuel Storage Installation at INTEC.

On Feb. 2, the 15th of 29 dry shielded container shipments to the ISFSI had been received and placed into a horizontal storage module, marking the halfway point for the shipments from TAN to INTEC.

For the next four months, TMI Dry Storage Project and ISFSI employees will be going "full bore" to complete the project and meet the June 1 deadline established in the 1995 Idaho Settlement Agreement for placing TMI-2 fuel canisters into dry storage at INTEC.
<http://www.inel.gov/inews/2001/0213/0213tmi.shtml>

DOE Meets Another Commitment Under Idaho Settlement Agreement

April 23, 2001 DOE News Release

http://newsdesk.inel.gov/press_releases/2001/04-23TMI_milestone.htm

May 1, 2001 Three Mile Island accident: Brief history of INEEL Support

http://www.inel.gov/iNews/current/0501tmi_history.shtml

Three Mile Island-II Fuel Transferred Ahead of Schedule,
May 1, 2001

<http://www.inel.gov/facilities/tan-status.shtml>

Test Area North – Fact Sheet (TMI historical support)

<http://www.inel.gov/publicdocuments/factsheet/tan-fsheet.pdf>

A Commitment Kept, iNews,

May 1, 2001

On April 20, INEEL employees helped the Department of Energy keep a major commitment to the state of Idaho. The commitment involves the safe transfer of Three Mile Island Unit 2 accident core debris from Test Area North wet pools to safe dry storage at the Idaho Nuclear Technology and Engineering Center.

Related Stories

- [INEEL meets another milestone under Idaho Settlement Agreement](#)
- [Advanced systems used to relocate TMI fuel](#)
- [Three Mile Island accident: Brief history on INEEL support](#)

http://www.inel.gov/iNews/current/0501tmi_commit.shtml

A Decade of Progress: A Status Report of Environmental Management at the INEEL
July 2002 – Three Mile Island-II Fuel Transferred Ahead of Schedule, page 12 of this 28
page report

<http://www.inel.gov/publicdocuments/pdfs/emprog2002.pdf>

Test Area North – Background,

March 12, 2003

Test Area North (TAN) has technical capabilities in nuclear fuel operations and heavy metal manufacturing. TAN's current missions include:

- Storing and transporting Three-Mile Island (TMI) core debris to the Idaho Nuclear Technology and Engineering Center (INTEC) as part of DOE's Spent Nuclear Fuel Program. The TMI spent nuclear fuel program specifically tests spent fuel storage casks, prepares the fuel for shipment, and confronts logistics issues related to transporting spent nuclear fuel across the Site.
- A second current mission is the cleanup of legacy environmental problems from past operations. Scientists working here have pioneered a biologic remediation technique for destroying organic solvents in groundwater supplies without the need to pump the water to the surface for treatment. The technique has been successfully demonstrated to destroy trichloroethene contamination in a deep, fractured-rock aquifer. Because organic solvent pollution is one of the primary groundwater contaminants in the United States today, the scientific work has attracted national attention. It holds promise for solving one of the nation's most pressing water pollution problems at substantially less cost than was previously possible.

<http://www.inel.gov/facilities/tan.shtml>